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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,607

02/23/2004

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1810K (US) / TYCV 1810

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EXAMINER

DEMILLE, DANTON D

ART UNIT

PAPER NUMBER

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11/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/784,607	Applicant(s) TORDELLA ET AL.	
	Examiner Danton DeMille	Art Unit 3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-20,22,24-26 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-20,22,24-26 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/4/08, 11/12/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 1, 3-7, 11-15, 18-20, 22, 24-26, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Islava in view of Poole et al.

Islava teaches, for example, a sleeve 10 configured for disposal about a limb. The inflatable sleeve of Islava would inherently be a compression apparatus when it is inflated around the limb. Islava also teaches the longitudinal welds 30 allow the air chambers of each portion to comfortably wrap around the limb “without restricting blood flow” column 5, lines 7-10 thereby increasing blood flow over the prior art allowing vascular therapy to the injured limb. The sleeve including a first portion defining a first expandable chamber 50 and a second portion defining a second expandable chamber 60 and a third expandable chamber 90. Islava teaches “[d]etaching one portion 50 from another portion 60 also enables each portion to form a structure independently from the other” column 4, lines 53-55. Islava teaches perforations 46 between each portion of the sleeve to provide the detachable function for separating two inflatable portions one from the other. Islava teaches detaching one portion from another to form independent structures. This would suggest completely removing the one portion from the other. If the different portions were not completely removable they wouldn’t be “independent” as recited. While the drawings may not show the perforations extending continuously across the sleeve such would have been obvious in order to detach one portion from the other in order to provide the independent function.

Poole further exemplifies the convention of using detachable attachment means for being able to detach one portion of the inflatable sleeve from another to form independent structures.

Poole uses zippers. Poole additionally teaches a connector 24 for fluidly connecting a pressurized fluid source 26 to each of the expandable chambers. The second portion 14 including a connector 24 in fluid communication with a pressurized fluid source 26 and the first 22, second 20' and third expandable chamber 20'. The first portion 11 is removable from the second portion.

It would have been obvious to one of ordinary skill in the art to modify Islava to extend the perforations continuously across the sleeve to completely separate the different portions of the sleeve as taught by Poole in order to provide the advantage of completely separating one portion from the rest so they can be independently movable to accommodate different shaped body parts or to accommodate the curved shapes of the body or because it is not needed and to provide the connector as taught by Poole for fluidly connecting all of the different portions to one pressurized fluid source in order to use only one pressure source to inflate all of the bladders simultaneously.

Regarding claim 13, the Islava device is capable of performing the claimed functional intended use limitations.

Regarding claim 15, Poole teaches valve connectors 28 and 32 for fluidly connecting a pressurized fluid source to the chambers. Poole teaches a plurality of tubing 24 for interconnecting the pressurized fluid source to all of the chambers. Any specific arrangement of the tubing between the pressurized fluid source and the chambers would be well within the realm of the artisan of ordinary skill.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 1 and further in view of Dye '312.

Dye also teaches an inflatable sleeve in which there is an opening 26a-b, 28a-b that would function as a ventilation opening and is located between a second and third expandable chamber. It would have been obvious to one of ordinary skill in the art to further modify Islava to include an opening in the sleeve as taught by Dye for providing flexibility to the sleeve or for ventilation.

Claims 1, 3-11, 13-20, 22, 24-26, 28, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dye '312 in view of Islava, Poole et al. and Arkans '244.

Dye teaches a sleeve 10 configured to wrap about a leg and defining a plurality of ventilation openings 44. The sleeve includes a thigh portion including sub-chambers 38e and f, a calf portion including sub-chambers 38c and d and an ankle portion defining sub chambers 38a and b. Dye may not teach the thigh portion being removably connected to the calf portion however, there appears to be no unobviousness to separate different parts from one another in order to accommodate different patients needs. Different patients may not need to include the thigh portion of the inflatable sleeve. Other patients may have trauma or had surgery above the knee and therefore including the thigh portion could possibly cause injury. Being able to remove the thigh portion would appear to be well within the realm of the artisan of ordinary skill.

Islava teaches perforations such that "[d]etaching one portion 50 from another portion 60 also enables each portion to form a structure independently from the other" column 4, lines 53-55. Islava suggests each portion can be separated from the other in order to provide the ability to be independent. Islava teaches one conventional way of separating two inflatable sleeves one from the other using perforations. While Islava may be an inflatable splint the same detachable independent function would still be applicable to compression sleeves such as Dye. Poole also

teaches a sleeve that allows for the different sections of sleeve to be completely separated for assembly and disassembly and uses zippers to achieve this function. Poole also teaches a pressurized fluid source using tubing and valve connectors in order to shut off each portion as desired. It would have been obvious to one of ordinary skill in the art to modify Dye to include perforations as taught by Islava to disassemble the different sections of the sleeve so that each section can be independently used as taught by Islava as well as Poole.

Arkans also teaches a valve connector so that upon disconnection the upstream connector closes off the tubular pathway so that the upstream sleeve can maintain pressure. It would have been obvious to one of ordinary skill in the art to further modify Dye to include a valve connector as taught by Poole and Arkans to complete the details of separating the different portions of the sleeve for closing off the tubular pathway to maintain proper pressure within the remaining portion.

Regarding claim 16, Dye teaches a slit 26a and b that would inherently provide ventilation.

Regarding claim 17, the compression apparatus would be able to perform the claimed operational method and such intended use appears to be within conventional parameters and an obvious provision.

The method of providing the sleeve, disposing the sleeve about the limb, delivering pressurized fluid and deflating the chambers would be well within the realm of the artisan of ordinary skill and inherent in the operation of the prior art device. Since the different sections can be separated at any time dependent on practical considerations of intended use, there appears to be no unobviousness to remove one section from another in order to change the operation of

the device for the next patient or next session. There appears to be no unobviousness to when the sections are separated in order to accomplish the desired therapy. Poole also teaches being able to remove one section of the sleeve to be able to use the remaining sleeve alone as desired.

Claims 11, 12, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dye '312 in view of Islava, Poole et al., Arkans and Mitchell.

It would have been obvious to one of ordinary skill in the art to modify Dye to include perforations as taught by Islava to disassemble the different sections of the sleeve so that each section can be independently used as taught by Islava as well as Poole, as noted above. When separating the first portion from the second portion of the sleeve one would have to disconnect the hose to the first portion and still be able to operating the second portion by itself. Mitchell teaches a connector, figure 1, in which the downstream tubular pathways 14, 18 have quick disconnect ports 60 for individually disconnecting the downstream tubular pathways as desired or required. It would have been obvious to one of ordinary skill in the art to further modify Dye to include a coupling means as taught by Mitchell so that one can disconnect the tubular pathway to the first portion of the sleeve and still be able to operate the second portion by itself.

Response to Arguments

Applicant's arguments with respect to claims 3-20, 22, 24-26, 28-30 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danton DeMille whose telephone number is (571) 272-4974. The examiner can normally be reached on M-F from 8:30 to 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu, can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

25 November 2008

/Danton DeMille/

Danton DeMille
Primary Examiner
Art Unit 3771